



<110> Meulewater, Frank
Cornelissen, Marc
Van Eldik, Gerben
Jacobs, John

<120> Methods and means for delivering inhibitory RNA to
plants and applications thereof

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AB
<170> PatentIn Ver. 2.0

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<213> Artificial Sequence

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<223> Description of Artificial Sequence: cDNA copy of
the nucleotide sequence of the genome of TNV-A

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<213> Artificial Sequence

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<223> Description of Artificial Sequence: cDNA copy of
the nucleotide sequence of the genome of TMV-U1

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<211> 1245

<212> DNA

<213> Artificial Sequence

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<222> Description of Artificial Sequence: cDNA copy of the nucleotide sequence of the genome of STNV-2

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1245

<210> 4

<211> 1058

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: cDNA copy of the nucleotide sequence of the genome of STMV

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<210> 5

<211> 6355

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: cDNA copy of the nucleotide sequence of the genome of TMV-U2

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<210> 6

<211> 2346

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence : nucleotide
sequence of the tomato phytoene desaturase (pds)
encoding cDNA

<400> 6

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gaaccactcc ctatatcttc taggtgctt cattcggtcc gaggtaaagaa aagatttt 180
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gaattc 2346

<210> 7

<211> 7096

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: nucleotide sequence of the tobacco nitrate reductase (nia-2) encoding cDNA

<400> 7

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ggagtgtggc cctaattcca agagagaaaa tcccatgcaa actcatcgac aagcaatcca 5760
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acttcaaagg aattcaccct aaattcccc atggagggca aatgtcacag tatcttgatt 6000
ctatgccgtt agggtcattt ctcgacgtga aaggtccatt aggtcacatt gaataccaag 6060
gaaagggaaa ttcttagtt catggcaaac agaagttgc caagaagttg gccatgata 6120
caggtggaaac aggaataact ccagtgtatc aagtcatgca ggcaattctg aaagatccag 6180
aagatgacac agaaatgtat gtgggtatg ctaacagaac agaggatgtat attttactt 6240
aggaagagct tgattcatgg gctgagaaaa ttccagagag ggttaaagtt tggatgtgg 6300
ttcaggattc tattaaagaa ggatggaaatc acagcattgg ttttattaca gaagccattt 6360
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cgaaagttgt aatgtttacc atgacaaatt gtattcaatt cctcatggaa tagtaacatt 6780
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aaaccacgaa tatcattatg cagacgtata ggttaattat ctacttttg aaaaaaaatc 7020
tattttctt atgtggctt tcaaaaataat attctagaac cttttgtata ttccctttta 7080
acttctattt agttttt 7096

<210> 8
<211> 1839
<212> DNA
<213> Artificial Sequence

A.1
<220>

<223> Description of Artificial Sequence: nucleotide sequence of the tobacco nitrite reductase (nir-1) encoding cDNA

<400> 8

tttctattaa atttctggca ctttcattgc caaatccagc tagattttcc aagaatgctg 60
tcaagctcca cgcaactccg ccgtctgtgg cagcgccggc agctggtgct ccagagggtt 120
ctgctgagag gctagaaccc agagttgagg aaaaagatgg ttattggata ctcaggagc 180
agtttagaaa aggcataaat cctcaagaaa aggtcaagat tgagaagcaa cctatgaagt 240
tgttcatgga aaatggtatt gaagagctt ctaagatacc cattgaagag atagatcagt 300
ccaagcttac taaggatgtat attgatgtt ggcttaagtg gcttggcctc ttccatagga 360
gaaagaacca atatggcggtt ttcatgtatgaa gattgaagct tccaaatggaa gtaacaacgaa 420
gtgcacagac tcgatacttg gcgagtgta taaggaaata cgggaaagaa ggatgtgctg 480
atattacaac gaggcaaaat tggcagattc gtggagttgt actgcctgat gtgcccggaga 540
tactaaaggg actagcagaa gttgggttgc ccagtttgcg gatggccatg gacaatgtca 600
ggaatccagt agggaaatcct cttgctggaa ttgatccaga agaaatagta gacacagggc 660
cttacactaa tttgctctcc caatttatca ctggcaattc acgaggcaat cccgcagttt 720
ctaacttgcc aaggaagtgg aatccgtcg tagttaggctc tcatgatctt tatgaacatc 780
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acgatatgta tgagctagct cgtagtgcg atgagttatgg ttcaggagag atccggctta 1260
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caggctgccc gaatacgtgt gcacaagttc aagttgcggaa cattggattc atgggatgcc 1560
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taccacttgt tgtggactta ctagttaaaca actttggtgc agttccacgaa gaaagagaag 1740
aaacagaaga ctaataaaaat tttagaatgt tggtgattt gctgtgttca taacatgtaa 1800
tgtatgataaa atcaatgcaaa acatttctac ctacgtgag 1839

<210> 9

<211> 1294

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: cDNA of the beta-1,3-glucanase of Nicotiana plumbagenifolia

<400> 9

A1

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taggagctca atcagtaggt gtttgcacg gaatgctggg caacaacttg ccaccagcat 120
cacaagtgt acaactgtac aagtcaaaaa acataagaag aatgaggctt tatgatccaa 180
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gcccgttaac aggcacatct tcacttaccc gatatcttct tccggccatg aggaacattc 420
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gtgagatgtg ataagagagt tctctttaaa tatcttaca tggatggaaa acttagtacc 1140
aataactaga ttgtttcttt cttagtgc当地 tttcttgc当地 atgagagact agtacttgct 1200
ctctgtgtcc ttgtggagag taactagaga caaattaagc aaataacata aataattgag 1260
tgttgattct gcaatgataa atagaaaaaa aaaa 1294

<210> 10

<211> 720

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: green
fluorescent protein encoding region

<400> 10

atggtgagca agggcgagga gctgttccacc ggggtgggtgc ccattcctggc cgagctggac 60
ggcgacgtaa acggccacaa gttcagctg tccggcgagg gcgaggcgaa tgccacccat 120
ggcaagctga ccctgaagtt catctgcacc accggcaagc tgccctgtcc ctggccacc 180
ctcgtgacca ccctgaccta cggcggtcag tgcttcagcc gctaccccgaa ccacatgaag 240
cagcacgact tcttcaagtc cgccatgccc gaaggctacg tccaggagcg caccatctc 300
ttcaaggacg acggcaacta caagacccgc gccgagggtga agttcgaggg cgacaccctg 360
gtgaaccgca tcgagctgaa gggcatcgac ttcaaggagg acggcaacat cctggggcac 420
aagctggagt acaactacaa cagccacaac gtcttatatca tggccgacaa gcagaagaac 480
ggcatcaagg tgaacttcaa gatcccccac aacatcgagg acggcagcgt gcagctcgcc 540
gaccactacc agcagaacac ccccatcgcc gacggccccc tgctgctgccc cgacaaccac 600
tacctgagca cccagtcgc当地 cctgagcaaa gaccccaacg agaagcgc当地 tcacatggc当地 660
ctgctggagt tcgtgaccgc当地 cgccgggatc actctcgcc当地 tggacgagct gtacaagtaa 720

<210> 11

<211> 1809

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial

Sequence:beta-glucuronidase encoding region

<400> 11

atggtccgtc ctgtagaaac cccaaacccgt gaaatcaaaa aactcgacgg cctgtggca 60
ttcagtctgg atcgcgaaaa ctgtggatt gatcagcgtt ggtggaaag cgcgttacaa 120
gaaagccggg caattgctgt gccaggcagt tttacgatc agttcgccga tgcagatatt 180
cgtaattatg cggcaacgt ctggtatcag cgcaagtttct ttataccgaa aggttggca 240
ggccagcgtt tcgtgctgctt tttcgatcgt gtcactcatt acggcaaaagt gtgggtcaat 300
aatcaggaag ttagtggagca tcagggcggc tatacgccat ttgaagccga tgcacgccc 360
tatgttatttgc cgggaaaag tgtacgtatc accgtttgtt tgaacaacga actgaactgg 420
cagactatcc cggccggaaat ggtgattacc gacgaaaacg gcaagaaaaa gcagtcttac 480
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aacacctggg tggacgatatacccgatgttgc acgcatgtcg cgcaagactg taaccacgccc 600
tctgttacttgc ggcagggttgc ggcataatgtt gatgtcagtc ttgaactgcttgc tgcggat 660
caacaggtgg ttgcaactgg acaaggcact agcgggactt tgcaagttgtt gatccgcac 720
ctctggcaac cgggtgaagg ttatcttatc gaaactgtcg tcacagccaa aagccagaca 780
gagtgtgata tctacccgct tcgcgtcgcc atccggtcag tggcagtgaa gggcgaacag 840
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attggggcca actccttaccg tacctcgatc tacccttacg ctgaagagat gctcgactgg 1020
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aaccacccaa gcgtgggtt gttggatgtt gccaacgaaac cggatacccg tccgcaagt 1260
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gtgctgtgcc tgaaccgttta ttacggatgg tatgtccaaa gcccgtt gaaacggca 1440
gagaaggatc tgaaaaaaaacttctggcc tggcaggaga aactgcata gcccattatc 1500
atcacccaaat acggcgtggta tacgttagcc gggctgcact caatgtacac cgacatgtgg 1560
agtgaagagt atcagtgtgc atggctggat atgtatcacc gctgttttgc tgcgtcagc 1620
gccgtcgtcg gtgaacaggt atgaaatttgc gcccattttgc acgttgcac aggcataatttgc 1680
cgcggtggcg gtaacaagaa agggatcttcaactcgacacc gcaaaacccgaa gtcggcggtt 1740
tttctgtgc aaaaacgctt gactggcatg aacttcgggtt aaaaacccgca gcaaggagggc 1800
aaacaatga 1809

<210> 12

<211> 411

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: cDNA copy of
part of the region of a TMV-U2 variant comprising

the origin of assembly

<400> 12

ccctcgccaa ttgaactcac tgaaaaagtt gttgatgagt tcgttagatga agtaccgatg 60
gctgtgaaac tcgaaagggtt ccggaaaaca aaaaagagag tggtaggtaa taatgttaat 120
aataagaaaa taaataatag tggtaagaag gggttggaaag ttgagggaaat tgaggataat 180
gtaagtatg acgagtctat cgcgtcatcg agtacggttt aatcaatatg ccttatacaa 240
tcaactctcc gagccaaattt gtttacttaa gttccgctta tgcagatcct gtgcagctga 300
tcaatctgtg tacaaatgca ttaggtaacc agtttcaaac gcaacaagct aggacaacag 360
tccaacagca atttgcggat gcctggaaac ctgtgcctag tatgacagtg a 411

A
<210> 13

<211> 198

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: cDNA copy of
STMV leader region

<400> 13

agtaaaaactt accaatcaaa agacctaacc aacaggactg tcgtggcat ttatgctgtt 60
gggggacata gggggaaaac atattgcctt cttctacaag aggccttcag tcgccataat 120
tacttggcgc ccaattttgg gtttcagttt ctgtttccag ctatgggag aggttaagggtt 180
aaacccaaacc gttaatcg 198

<210> 14

<211> 455

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: cDNA copy of
STMV trailer region

<400> 14

gacaagtgcgc cttggttatt tcgtgttgg ttaactgaac ctcgacataa gcctttgg 60
tcgaagggtt aacgatccgc tcctcgctt agcttggggc ggcgtatctc ttatgtcaac 120
agagacactt tggcttatgg ttgtataaca atagatagac tcccgttgc aagatttaggg 180
ttaacagatc ttggcgttag tctggtttagc gcgttaaccgg cttgattta tggaatagat 240
ccattgtcca atggcttgc caatggaaacg ccgacgtggc tgtataatac gtcgttgaca 300
agtacgaaat cttgttagtgg ttttccctc cacttaaaatc gaagggtttt gttttggct 360
tcccgaacgc atacgttagt gtgactaccg ttgttcgaaa caagtaaaac aggaaggggg 420
ttcgaatccc tcccttaaccg cggtaagcg gccca 455

<210> 15

<211> 1971

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: cDNA copy of part of the genome of a TMV-U1 variant, comprising MP and CP genes

<400> 15

gaaaacactg tgattatagc tgcatgttg gcctcgatgc ttccgatgga gaaaataatc 60
aaaggaggct tttgtgtga cgatagtctg ctgtacttcc caaagggttg tgagttccg 120
gatgtgcaac actccgcgaa tcttatgtgg aatttgaag caaaactgtt taaaaaaacag 180
tatggatact tttgcggaag gtatgtata catcacgaca gaggatgcat tgtgttattac 240
gatcccctaa agttgatctc gaaacttggt gctaaacaca tcaaggattg ggaacacttg 300
gaggagttca gaaggtctct ttgtgtatgtt gctgtttcggt tgaacaattt tgctgttattac 360
acacagttgg acgacgctgt atgggaggtt cataagaccg cccctccagg ttctgttattt 420
tataaaagtc tggtaagta ttgtctgtat aaagttcttt tttagaagttt gtttataagat 480
ggctctagtt gttaaaggaa aagtgaatat caatgagttt atcgacactga caaaaatgga 540
gaagatctta ccgtcgatgt ttacccctgt aaagagtgtc atgtgttcca aagttgataa 600
aataatgtt catgagaatg agtcattgtc agaggtaaac cttctcaaag gagttaaagct 660
tattgatagt ggatacgtct gtttagccgg tttgggtcgac acggggcaggt ggaacttgcc 720
tgacaattgc agaggaggtg tgagcgtgtg tctgggtggac aaaaggatgg aaagagccga 780
cgaggccact ctcggatctt actacacagc agctgcaaag aaaagatttc agttcaaggt 840
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caatattaga aatgtaaaga tgcagcggg tttctgtccg ctttctctgg agtttgcgtc 960
ggtgtgtatc gtttataagaa ataataaaaa attaggtttt agagagaaga tcacaagtgt 1020
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gaattgatca gaggAACCGG atcttataat cggagcttt tcgagagctc ttctggttt 1740
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aagggttggc tcttggatcg cgcgggtcaa atgtatatgg ttcatataca tccgcaggca 1920
cgtataaaag cgaggggttc gaatcccccc gttacccccc gtagggggccc a 1971